

Notice of Allowability

Application No.

10/823,712

Examiner

Steven J. Fulk

Applicant(s)

KOO ET AL.

Art Unit

2891

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 8/30/06.
2. ☒ The allowed claim(s) is/are 1-10 and 12-18.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


BRADLEY K. SMITH
PRIMARY EXAMINER

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the claims, cancel claims 11 and 19.

Election/Restrictions

2. This application is in condition for allowance except for the presence of claims 11 and 19 directed to an invention non-elected without traverse. Accordingly, claims 11 and 19 been cancelled.

Response to Arguments

3. Applicant has amended claims 12 and 13 to overcome the rejection under 35 U.S.C. 102(b), which also overcomes the objection to dependent claims 14-18. Therefore, the rejection of claims 12 and 13 and the objection to claims 14-18 have been withdrawn.

Allowable Subject Matter

4. Claims 1-10 and 12-18 are allowed.

5. The following is a statement of reasons for the indication of allowable subject matter: a search of the prior art failed to disclose or reasonably suggest a flat panel display comprising red, green and blue unit pixels, each of the unit pixels including

a transistor, and wherein transistors of at least one unit pixel includes a channel layer with different current mobility, as recited in independent claims 1 and 12.

Yamazaki et al. '098 discloses a flat panel display comprising red, green and blue unit pixels, each of the unit pixels including a transistor, and wherein at least one of the transistors of the unit pixels include channel layers with a different film quality (channel dimensions), however the mobility of the channel regions are the same and the channel lengths are different.

Takemura '716, Zhang et al. '733 and Joo et al. '130 disclose a flat panel display having transistors with different current mobilities, however it is the drive transistors and the pixel transistors that have different mobilities. The unit pixel transistors have the same mobility and film qualities.

Yamada '025, Cok et al. '549 and Kim et al. '819 disclose a flat panel display comprising red, green and blue unit pixels, each of the unit pixels including a transistor, wherein white balance is achieved using different areas of luminescent material. However, the unit pixel transistors have the same mobility and film qualities.

Yamazaki '565 and Tanaka '647 disclose a flat panel display comprising red, green and blue unit pixels, each of the unit pixels including a transistor, wherein white balance is achieved using a different thickness of luminescent material. However, the unit pixel transistors have the same mobility and film qualities.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should

preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

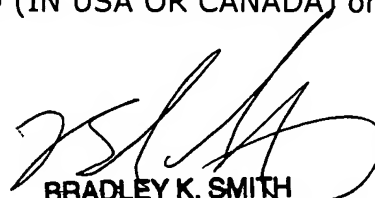
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven J. Fulk whose telephone number is (571) 272-8323. The examiner can normally be reached on Monday through Friday, 9:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Baumeister can be reached on (571) 272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven J. Fulk
Patent Examiner
Art Unit 2891
September 7, 2006

SJF


BRADLEY K. SMITH
PRIMARY EXAMINER